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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,670	07/15/2003	Kuan-Chang Peng	MR3003-54	5895
4586	7590	01/10/2005	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			TRAN, LONG K	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/618,670	PENG, KUAN-CHANG	
	Examiner	Art Unit	
	Long K. Tran	2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Reply on November 2, 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 21 is/are pending in the application.
- 4a) Of the above claim(s) 13 - 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 8 is/are rejected.
- 7) ☒ Claim(s) 9 - 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of **Species I, claims 1 – 12** in the reply filed on November 2, 2004 is acknowledged.

Specification

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
3. The disclosure is objected to because of the following informalities: Page 4, line 4: change "44' to -- 43 --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claim 1 recites the limitation "said first layer" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3, 4 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Ghosh (US Patent Application Publication No. 2004/0201027).

8. Regarding claim 1, Ghosh discloses an organic electroluminescent device adapted for assembly function, comprising:

a substrate 134 (fig. 5);

at least one first electrode 136 (fig. 5) formed on the surface of said substrate, wherein a part of surface of the substrate comprises at least one light-emitting layer EL (fig. 5) and a second electrode 137 (fig. 5) in turn;

at least one isolating seal cap 138 (fig. 5) formed at the surface of said substrate for covering and protecting said light-emitting layer, wherein one side of said isolating seal cap comprises at least one first channel 196 (fig. 5); and

at least one first connecting line 156 (fig. 5) allowed for passing through said first channel and contacting a part of surface of said first electrode.

Regarding claim 3, Ghosh discloses the first electrode 136 (fig. 5) is covered inside the isolation seal cap 138 (fig. 5).

Regarding claim 4, Ghosh discloses a seal pad at left and bottom side of the channel 196 served for covering as well as protecting the light-emitting EL.

Regarding claim 8, Ghosh discloses a moisture barrier layer 135 (fig. 5) being formed on an internal wall of the isolation cap 138 (fig. 5).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 5, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghosh (US Patent Application Publication No. 2004/0201027) in view of Kobayashi (US Patent Application Publication No. 2002/0068191).

11. Regarding claim 2, Ghosh discloses the claimed invention of claim 1 except for a sealing glue with isolation function is formed between the top surface of the first channel and the first connecting line.

However, Kobayashi shows a sealing layer 6 (fig. 2) sealing the gap between the external terminal 13 (fig. 2), electrode 2 (fig.2) and cover 11 (fig. 2; [0059], [0065] and [0066]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the adhesive of Kobayashi into the channel of Ghosh, in order to secure and seal of moisture from the EL.

Regarding claim 5, Ghosh discloses at least one second channel 96 (fig. 4B) formed on another side of the isolating seal cap: and

At least one second connecting line allowed for passing through a second channel and contacting a part of surface of the second electrode (note: Ghosh does not

explicitly show the second connecting line being connected to a second electrode.

However, figure 4B illustrates two first channel 96, each one for each OLED. Therefore, there is a second connecting line connected two a second electrode).

Ghosh does not explicitly show a second glue with isolation function is formed between top surface of the second channel and the second connecting line.

However, Kobayashi shows a sealing layer 6 (fig. 2) sealing the gap between the external terminal 13 (fig. 2), electrode 2 (fig.2) and cover 11 (fig. 2; [0059], [0065] and [0066]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the adhesive of Kobayashi into the channel of Ghosh, in order to secure and seal of moisture from the EL.

Regarding claim 6, Ghosh discloses first connecting line and said second connecting line are connected to corresponding controllers, respectively (note: Ghosh does not explicitly show the second connecting line being connected to a second controller. However, figure 4B illustrates two first channel 96, each one for each OLED. Therefore, there is a second connecting line connected to a second controller).

Regarding claim 7, Ghosh discloses the claimed invention of claim 1 except for a width of a part of surface of the substrate not covered by a vertical-extending position of the isolation seal cap is not greater than 1.0mn.

However, it would have been well known in the art that the selection of those parameters such as **energy, concentration, temperature, time, molar fraction, depth, thickness, etc.**, would have been obvious and involve routine optimization

which has been held to be within the level of ordinary skill in the art. "Normally, it is to be expected that a change in **energy, concentration, temperature, time, molar fraction, depth, thickness, etc., or in combination of the parameters** would be an unpatentable modification. Under some circumstances, however, changes such as these may impart patentability to a process if the particular ranges claimed produce a new and unexpected result which is different in kind and not merely degree from the results of the prior art ... such ranges are termed "critical ranges and the applicant has the burden of proving such criticality.... More particularly, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller* 105 USPQ233, 255 (CCPA 1955). See also *In re Waite* 77 USPQ 586 (CCPA 1948); *In re Scherl* 70 USPQ 204 (CCPA 1946); *In re Irmischer* 66 USPQ 314 (CCPA 1945); *In re Norman* 66 USPQ 308 (CCPA 1945); *In re Swenson* 56 USPQ 372 (CCPA 1942); *In re Sola* 25 USPQ 433 (CCPA 1935); *In re Dreyfus* 24 USPQ 52 (CCPA 1934).

Moreover, the surface of the substrate not covered by vertical-extending position of the isolation seal cap has not been alleged by applicant to be of significant importance for patentability.

Allowable Subject Matter

12. Claims **9 – 12** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is an examiner's statement of reasons for the indication of allowable subject matter: Claims **9 – 12** are allowable over the prior art of record because none of the prior art whether taken singularly or in combination, especially when these limitations are considered within the specific combination claimed, to teach:

a second isolation cap 81 (fig. 8) with a third channel 895 (fig. 8) and a moisture-absorbing layer 85 (fig. 8).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long K. Tran whose telephone number is 571-272-1797. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Long Tran



December 29, 2004



David Nelms
Supervisory Patent Examiner
Technology Center 2800